

66345-0036

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Olivier DUPUIS *et al.*

Serial No.: 10/541,210

Filed: June 30, 2005

PHOTOSENSITIVE DISPERSION WITH
ADJUSTABLE VISCOSITY FOR METAL
DEPOSITION OF AN INSULATING
SUBSTRATE AND USE OF SAME

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SUBMISSION OF TRANSLATION OF IPER

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

November 10, 2006

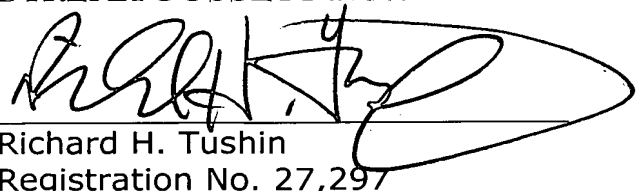
Sir:

The applicant herewith submits a translation of the IPER, issued 7
October 2004.

Respectfully submitted,

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By:


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Translation

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 135967/SZ	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/BE2003/000229	International filing date (<i>day/month/year</i>) 24 décembre 2003 (24.12.2003)	Priority date (<i>day/month/year</i>) 03 janvier 2003 (03.01.2003)
International Patent Classification (IPC) or national classification and IPC C23C 18/30		
Applicant SEMIKA S.A.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 4 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of _____ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 29 juillet 2004 (29.07.2004)	Date of completion of this report 07 October 2004 (07.10.2004)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/BE2003/000229

I. Basis of the report

1. This report has been drawn on the basis of *(Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.)*:

☒ the international application as originally filed.

☒ the description, pages 1 - 11, as originally filed,
pages _____, filed with the demand,
pages _____, filed with the letter of _____,
pages _____, filed with the letter of _____.

☒ the claims, Nos. 1 - 24, as originally filed,
Nos. _____, as amended under Article 19,
Nos. _____, filed with the demand,
Nos. _____, filed with the letter of _____,
Nos. _____, filed with the letter of _____.

☐ the drawings, sheets/fig _____, as originally filed,
sheets/fig _____, filed with the demand,
sheets/fig _____, filed with the letter of _____,
sheets/fig _____, filed with the letter of _____.

2. The amendments have resulted in the cancellation of:

☐ the description, pages _____

☐ the claims, Nos. _____

☐ the drawings, sheets/fig _____

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

4. Additional observations, if necessary:

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/BE 03/00229

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-24	YES
	Claims		NO
Inventive step (IS)	Claims	1-24	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-24	YES
	Claims		NO

2. Citations and explanations

1. Reference is made to the following document:

D1: WO 95/18879 A (Sensors and Synergy SA; Dupuis Olivier; Delvaux Mary Hélène) 13 July 1995 (1995-07-13).

2. The present application relates to a photosensitive dispersion, which has an adjustable viscosity, for depositing metal on an insulating substrate, and the use of same.

Document D1, which is considered to be the prior art closest to the subject matter of claim 1, describes (the references between parentheses apply to said document):

a polymeric resin, which has an adjustable viscosity and pH, for depositing catalytic palladium on a substrate, which resin contains a combination of a palladium salt, a complex-forming agent, a polymer, a basic compound and a solvent selected from water, methanol and ethanol.

It follows that the subject matter of claim 1 differs from this known dispersion in that it contains a pigment that confers oxidation-reduction properties under light irradiation.

By using this pigment, it is possible to produce dispersions that no longer require the use of a noble metal such as palladium but, instead, use other metals, which are more common and less expensive. The photosensitivity of said dispersions is increased to a wavelength range of 190 to 450 nm (compared with 190 and 300 nm in the prior art dispersion) and the irradiation energy required is much weaker (less than 100 mJ/cm²).

It follows that the claim 1 fulfils the requirements of PCT Article 33(2) and 33(3).

3. Claims 2-23, which are dependent on claim 1, as well as claim 24, which claims a metal-depositing method using a dispersion as per the invention, also fulfil, as such, the PCT requirements of novelty and inventive step.